

Work Order ID 84846

84846

Page 1

May-24-12 7:59:03 AM

Item ID: D3699-042

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Support Assembly

Stop

NS2

Start Date: 24/05/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: ML5

Date: 12/05/28

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date: c

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3699	Rev A								
100		0.00							
100	FLOW WATER JET								
Waterjet		0.00							
FLOW CNC Waterjet	Memo								
<u>6661.050</u>	1-Cut as per Dwg D3699Dwg Rev: <u>A</u> Prog Rev: <u>A</u>								
	***grain direction along 9.00" *** 2- Deburr if necessary								
110		0.00							
110	QC2- Inspect parts off machine FAI/FAIB								
QC		0.00							
Quality Control	Memo								
120		0.00							
120	QC8- Inspect parts - second check								
QC		0.00							
Quality Control	Memo								

8 0 JM 12-6-15

8 0 JM 12-6-15

8 0 JM 12-6-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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N900040100

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Stop ***NS2***

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8

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	NC BRAKE								
Brake NC	Memo	0.00				7	(X)		SS 12/06/15
Brake NC	Bend as per Dwg D3697								
140		0.00							
140	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							SS 12/06/15
Quality Control									
150		0.00							
150	Small Fab								
Small Fab	Memo	0.00				7X			ES 12/06/19
Small Fab	1- counter sink holes as per dwg D3699								

W/O: 84846		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3694-42 PAR #: _____ Fault Category: SMALL FAB NCR: Yes No DQA: OK Date: 12/6/04
 Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: OK Date: 12/7/5

NCR: 12-1556		WORK ORDER NON-CONFORMANCE (NCR) \$ 21.94						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/6/15	130	1 part is scrap at the set up out of tolerance R.C process	S 057042 12/6/15	Scrap = destroy No replace	S 12/6/15	S 12/6/15	S 057042 12/6/15	S 12/6/15

NOTE: Date & initial all entries

Work Order ID 84846

84846

Page 3

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NS2

Item Name: Support Assembly

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8

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

170

Chemical Conversion Coat per QSI005 4.1

0.00

170

HandFinish

Memo

0.00

Hand Finishing

180

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

180

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

3200F

4:20

M121274

7

7 3/6 12-6-19

7X

MT 12/06/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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May-24-12 7:59:03 AM

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Page 4

Item ID: D3699-042

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N900040100

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Revision ID:

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Item Name: Support Assembly

Start Date: 24/05/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC3- Inspect Part Finish	0.00							
190									
QC	Memo	0.00				7	0	12-6-20	
Quality Control									
200	Pick Kit	0.00							
200									
Packaging	Memo	0.00				7x			12/06/12
Packaging									
210	Small Fab	0.00							
210									
Small Fab	Memo	0.00				7x			12/06/12
Small Fab	Assemble as per dwg D3699								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 84846

May-24-12 7:59:03 AM

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Page 5

Item ID: D3699-042

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Item Name: Support Assembly

Start Date: 24/05/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC5- Inspect part completeness to step on W/O	0.00							
220									
QC	Memo	0.00		5.7/6/26		ⓧ			
Quality Control									
230	Identify as per dwg & Stock Location: <u>255</u>	0.00							
230									
Packaging	Memo	0.00				7			12/06/27 JB
Packaging									
240	QC21- Final Inspection - Work Order Release	0.00							
240									
QC	Memo	0.00							12/6/28 JH
Quality Control									

ME
12-06-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-24-12 7:59:06 AM

Page 1

Work Order ID: 84846

84846

Parent Item: D3699-042

D3699-042

Parent Item Name: Support Assembly

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 08-04-25 new issue DD verified by:ec
IPP Rev:B 08-07-14 revA as per dwg DD verified by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS20426AD3-3 Rivet		Purchased	No			100	Each	3,415.000	2	16			

MS20426AD3-3

**

Location

Loc Qty

Loc Code

ST316

3415

119109

569

121011

2429

19099

417

M6061T6S.050

Purchased

No

210

sf

194.6640

0.4569

3.847579

M6061T6S 050

**

6061-T6 .050 Sheet

Location

Loc Qty

Loc Code

021

118.5

1211920

118.5

MAT021

76.164

114799

61.164

114993

15

114799

Jun 12-6-15

JP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-24-12 7:59:06 AM

Page 2

Work Order ID: 84846

Parent Item: D3699-042

Parent Item Name: Support Assembly

84846

D3699-042

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 8.00

Required Qty: 8.00

MS21059L3

Purchased

No

210

Each

324.0000

1

8

MS21059L3

Nut Plate

**

Handwritten signature and date: 06/06/2012

Location

Loc Qty

Loc Code

302

82

121185

82

ST301

28

118614

8

119546

20

ST302

214

120308

13

120833

1

121444

100

121524

100

Handwritten number 7 and several horizontal lines

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	84846
Description: Support, RH		Part Number:	D3699-2
Inspection Dwg: D3699 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

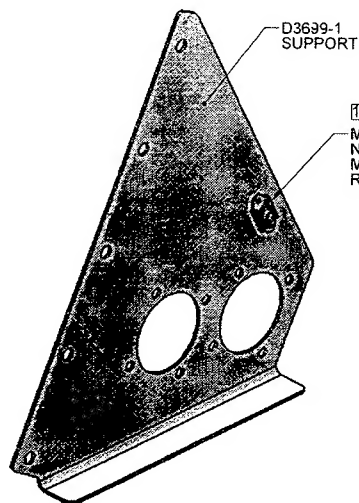
☒ **First Article**

 ☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	0.098"	✓		✓	minor
Ø0.180	+0.005/-0.001	0.180"	-		✓	"
Ø0.238	+0.005/-0.001	0.238"	-		✓	"
Ø1.525	+0.012/-0.001	1.524"	✓		✓	"
0.36	+/-0.030	0.37"	✓		✓	"
0.62	+/-0.030	0.627"	-		✓	"
0.96	+/-0.030	0.955"	-		✓	"
2.21	+/-0.030	2.213"	-		✓	"
4.12	+/-0.030	4.119"	✓		✓	"
8.95	+/-0.030	8.965"	-		✓	Prototype
1.925	+/-0.010	1.929"	✓		✓	minor
8.61	+/-0.030	8.613"	✓		✓	Prototype
2.62	+/-0.030	2.625"	-		✓	minor
0.344	+/-0.010	0.347"	✓		✓	minor
0.688	+/-0.010	0.690"	-		✓	"
0.64	+/-0.030	0.638"	-		✓	"
2.66	+/-0.030	2.655"	✓		✓	"
5.75	+/-0.030	5.751"	-		✓	"
6.41	+/-0.030	6.421"	✓		✓	"
0.300	+/-0.010	0.297"	-		✓	"
0.923	+/-0.010	0.918"	-		✓	"
0.050	+/-0.010	0.048"	✓		✓	

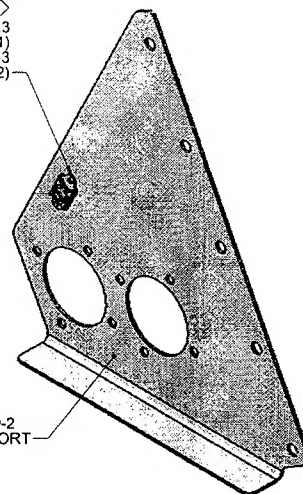
Measured by:	Jm	Audited by:	S	Prototype Approval:	N/A
Date:	12-6-15	Date:	12/6/15	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.09.04	New Issue	KJ/DD	



D3699-041 SUPPORT ASSEMBLY

①
MS21059L3
NUTPLATE (1)
MS20426AD3-3
RIVET (2)



D3699-042 SUPPORT ASSEMBLY

D3699-2
SUPPORT

PART LIST

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3699-041	SUPPORT ASSEMBLY
	X	D3699-042	SUPPORT ASSEMBLY
1		D3699-1	SUPPORT
	1	D3699-2	SUPPORT
1	1	MS21059L3	NUTPLATE
2	2	MS20426AD3-3	RIVET

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 84846 MLJ
12/05/28

RELEASED
08-07-08

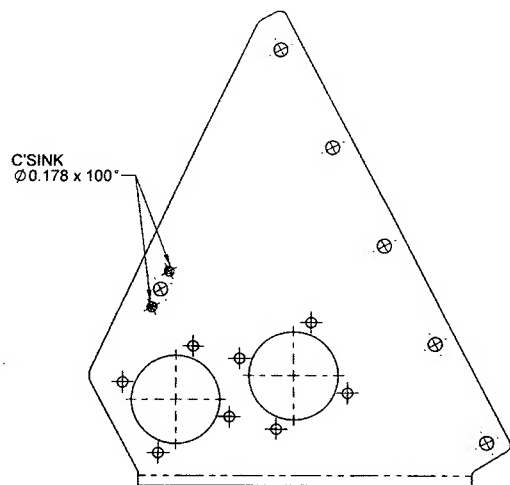
NOTES:

- 1) INSTALL MS21059L3 NUTPLATE USING C'SINK $\phi 0.098$ HOLES ON D3699-1/-2
- 2) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY P/N D3699-041/-042 & B/N USING FINE POINT PERMANENT INK MARKER
- 3) WEIGHT: 0.17 lb EACH

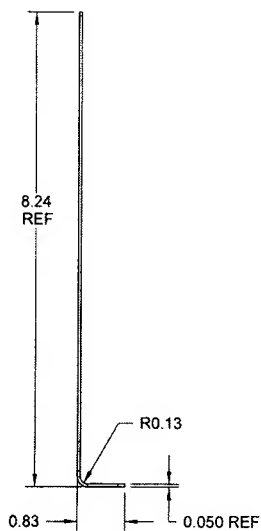
A	NEW ISSUE	RF	08.05.12
REV.	DESCRIPTION	BY	DATE
DESIGN	JE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JE		
CHECKED	JP	DRAWING NO.	REV. A
MFG. APPR.	JP	D3699	SHEET 1 OF 2
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	SUPPORT ASSEMBLY	NTS
DATE	08.05.12	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED FOR COMMERCIAL PURPOSES TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

D3699-1 LH SUPPORT

D3699-2 RH SUPPORT



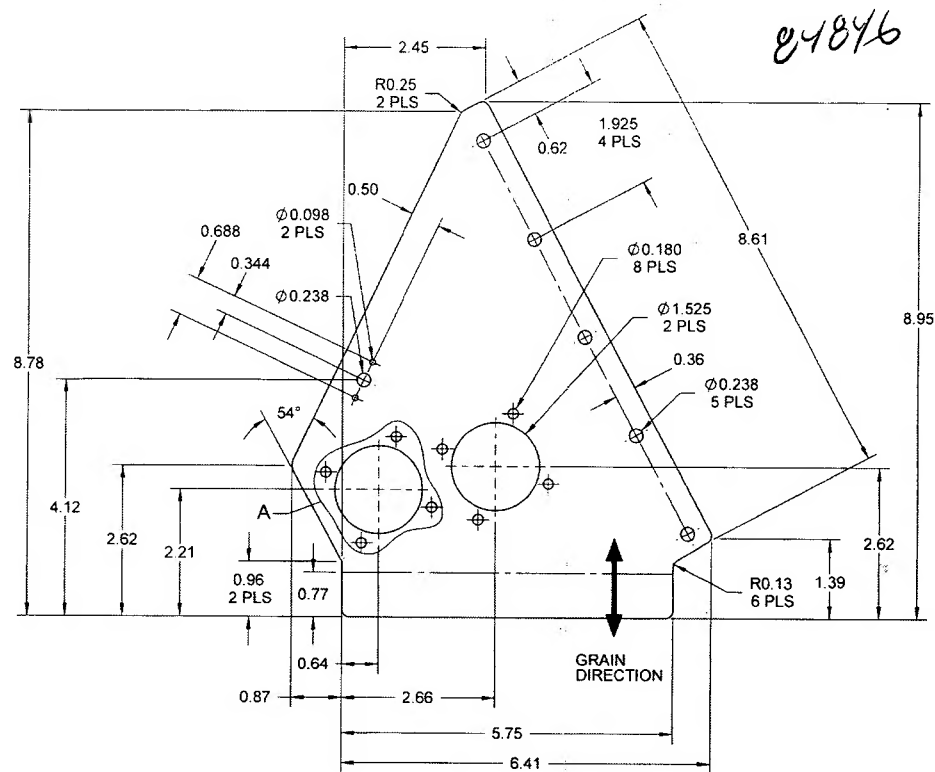
C-SINK
Ø0.178 x 100°



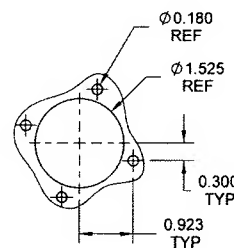
**D3699-1 SUPPORT, LH SHOWN
(D3699-2 SUPPORT, RH OPPOSITE)
(MAKE FROM D3699-1F FLAT PATTERN)**

NOTES:

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) OR 6061-T6 (QQ-A-250/11) SHEET 0.050 THICK
(REF. DART SPEC. M2024T3S.050 OR M6061T6S.050)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.17 lbs






D3699-1F FLAT PATTERN



DETAIL A

RELEASED
02-07-08

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3699	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SUPPORT ASSEMBLY	NTS
DATE	08.05.12	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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